



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,490	01/15/2004	Georg Burkhart	512425-2098	5973

7590 07/13/2005

William F. Lawrence, Esq.
c/o FROMMER LAWRENCE & HAUG LLP
745 Fifth Avenue
New York, NY 10151

EXAMINER

MOORE, MARGARET G

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,490

Applicant(s)

BURKHART ET AL.

Examiner

Margaret G. Moore

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 to 16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1712

1. Claims 1 to 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the definition of A is incomplete. It should be 35 m²/g. As claimed this requirement makes no sense and is confusing.

In claim 9, defining the viscosity without providing the temperature at which the viscosity was measured renders this claim limitation indefinite. That is, since viscosity is temperature dependent, one must include the temperature at which the viscosity was measured to ensure clarity. For instance, a siloxane having a viscosity of 10,000 cp at 0°C will not have a viscosity of 10,000 cp at room temperature.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 to 6 and 6 to 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Litteral.

Initially the Examiner would like to note that she is aware from the discussion in the specification that the cation exchange resin in the claims is intended to distinguish itself from Amberlyst 15. For instance, she notes the table on the top of column 3. However this is not successful, as noted below.

Litteral teaches the equilibration of siloxanes in the presence of a cation exchange resin. See for instance the abstract. Particular attention is drawn to the

Art Unit: 1712

teachings on column 9 regarding the properties of Amberlyst 15. As can be seen, particularly from the fact that these this resin has a large particle size distribution, Amberlyst 15 comprises various particles. See for instance that the surface area has a distribution of 40 to 50. See also that the average pore diameter (synonymous with mean pore diameter) is from 20 to 60 nm. The table in applicants' specification only computes a "P value" for Amberlyst 15 when the mean pore diameter is 25 nm. The resin particles, however, can have a mean pore diameter as high as 60 nm. When the mean pore diameter meets the disclosed upper limit for Amberlyst 15, the corresponding P value is from 2.4×10^{-3} to 3.0×10^{-3} . Such values fall within the claimed P and A values. In this manner Litteral anticipates the instant claims.

For claim 2, see the definition of Y on column 5 as well as Examples 15 and 16. For claims 3, 4 and 6, see for instance the monomers in Example 1. For claim 5, see column 8, line 59. For claims 8, 9 and 13 again see Example 1. For claims 11 and 12, see column 9, lines 10 to 20.

5. Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Litteral.

The instant claim requires a pore diameter of at least *about* 65 nm. The term "about" is given a degree of latitude which allows for values below the limit of 65. In view of this degree of latitude, the term "about 65" appears to be fully met by the upper average pore diameter value of 60, taught by Litteral.

On the other hand, note that a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. In the event that the value of 60 does not meet the claimed value of about 65, the difference between the two would not have been sufficient for the skilled artisan to expect the properties to have been different. The examiner notes that applicants' examples are not sufficient to overcome this obviousness because these results are based on a mean pore diameter of 25.

Art Unit: 1712

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhart et al. in view of Litteral.

Burkhart teaches the methods of claims 15 and 16, but with the exception that they do not teach the process of claim 1. Burkhart et al. are silent as to how the SiH siloxanes used therein are prepared. Thus one having ordinary skill in the art would have been motivated to turn to conventional and common methods of making SiH siloxanes.

As noted supra, Litteral teach methods of making siloxanes, including SiH siloxanes, as shown in Examples 15 and 16, and the teachings on column 7, line 20. That is, Litteral teaches a method of making siloxanes, including SiH siloxanes, that anticipates the process in claim 1.

Thus the skilled artisan would have been motivated to prepare the SiH siloxane for the reaction in Burkhart et al. by means of the known method shown by Litteral. In this manner the skilled artisan would have found this claimed process to have been obvious over the teachings of the prior art.

The Examiner notes that Burkhart et al. is merely representative of a general reaction method that is quite common; the hydrosilylation of polyether in the presence of a platinum complex is well known in the art.

7. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application. In response to this requirement please provide the names of any products or services that have incorporated the claimed subject matter. Similarly, she requests the trade names and providers of any goods or services in competition with the goods or services the claimed subject matter has been embodied in. (See MPEP 704.11)

This request is made so the Examiner can determine what products fall within the claimed P and A values. There are many commercially available cation exchange resins used in the prior art and the Examiner is unable to ascertain if they meet the claimed P and A values or not. See for instance the various tradenames found in column 3, lines

Art Unit: 1712

45 to 50, of Omietanski, column 4, line 39, of Vick, column 5, lines 25 to 29 of Igarashi et al. and column 4, lines 5 to 10, in Litteral. The examiner assumes that applicants are aware of what commercially available cation exchange resins do and do not meet the requirements of claim 1. Applicants would have had to experiment with various resins to arrive at the necessity of the claimed P and A values.¹ The Examiner requests such information to ensure a thorough examination.

8. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mgm
7/11/05


MARGARET G. MOORE
PRIMARY PATENT EXAMINER
ART UNIT 1712

¹ As an aside, the Examiner notes that information leading her to believe that applicants are aware of only one cation exchange resin meeting the claimed requirements (Lewatit K 2621, used in the examples) could lead to a rejection under 35 USC 112, first paragraph, as the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the breadth of the claimed invention.